

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing  
(day/month/year)

Applicant's or agent's file reference

**B040174WO01-**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2005/004598**

International filing date (day/month/year)

**16.03.2005**

Priority date (day/month/year)

**30.03.2004**

International Patent Classification (IPC) or both national classification and IPC

Applicant

**KANEKA CORPORATION**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/004598

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language  
\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2005/004598

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
<b>1. Statement</b>			
Novelty (N)	Claims	5 - 7	YES
	Claims	1 - 4	NO
Inventive step (IS)	Claims		YES
	Claims	1 - 7	NO
Industrial applicability (IA)	Claims	1 - 7	YES
	Claims		NO
<b>2. Citations and explanations:</b>			
<p><b>Claims 1-4</b>  Document 1 cited in the ISR [JP, 2004-83854, A (Kaneka Corp.), 18 March, 2004 (18.03.04)] describes a vinyl chloride-based resin composition that is comprised of 0.1-50% by weight polyvinyl chloride-based copolymer resin containing a vinyl chloride-based monomer and a macromonomer having a vinyl-based polymer as a main chain and 99.9-50% by weight vinyl chloride-based resin (refer to claims). Document 1 describes that 3-20% by weight macromonomer components that constitutes the polyvinyl chloride-based copolymer resin (refer to embodiments 1-8), and describes that the macromonomer components are 4.2, 0.5 and 2.5 parts by weight, based on 100 parts by weight vinyl chloride-based resin (embodiments 15-17).  Therefore, the subject matters of claims 1-4 do not appear to be novel.</p> <p><b>Claims 1-4</b>  Document 2 cited in the ISR [JP, 61-43645, A (Kaneka Corp.), 3 March, 1986 (03.03.86)] describes the vinyl chloride-based resin composition that comprises a chloride-based copolymer resin obtained by copolymerizing vinyl chloride-based monomer and a bisphenol A modified di(meth)acrylate. Document 2 describes that 0.001-15 parts by weight bisphenol A modified di(meth)acrylate is added to 100 parts by weight vinyl chloride-based monomer (claims), and describes that the macromonomer components are 0.4-5 parts by weight, based on 100 parts by weight vinyl chloride-based resin (embodiments 1-8).  Therefore, the subject matters of claims 1-4 do not appear to be novel.</p> <p><b>Claims 5-7</b>  Document 2 is described as above.  The invention described in the subject matters of claims 5-7 and the inventions described in document 2 are compared. They differ in that the latter does not describe a fact of processing the resin composition using a specific method.  Nevertheless, a person skilled in the art could have appropriately obtained the resin composition described in document 2 by using the method which is known through the art.  Therefore, the subject matters of claims 5-7 do not appear to involve an inventive step.</p>			

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/004598

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The subject matter of claim 1 describes that "A vinyl chloride-based copolymer resin is obtained by copolymerizing a vinyl monomer with a macromonomer having a main chain comprising a polymer of an ethylene unsaturated monomer with a double bond". From this description, one cannot decipher what the "vinyl chloride" is derived of.

Since the subject matter of claims 1 and 3 include comparative examples 5, 6, 10-14, 20, 21, and 25-29 that apparently do not exhibit the effect of the present application, so that an extension of the present application is not clear.

# PATENT COOPERATION TREATY

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To:

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(PCT Rule 43bis.1)

<p>To:</p>		<p>Date of mailing (day/month/year)</p>
<p>Applicant's or agent's file reference <b>B040174WO01-</b></p>		<p style="text-align: center;"><b>FOR FURTHER ACTION</b> See paragraph 2 below</p>
<p>International application No. <b>PCT/JP2005/004598</b></p>	<p>International filing date (day/month/year) <b>16.03.2005</b></p>	<p>Priority date (day/month/year) <b>30.03.2004</b></p>
<p>International Patent Classification (IPC) or both national classification and IPC</p>		
<p>Applicant <b>KANEKA CORPORATION</b></p>		

1. This opinion contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the opinion
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application

2. **FURTHER ACTION**

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For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

<p>Name and mailing address of the ISA/JP</p>	<p>Authorized officer</p>
<p>Facsimile No.</p>	<p>Telephone No.</p>

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/004598

Box No. 1

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
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\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
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☐ a sequence listing  
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☐ in written format  
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  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2005/004598

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
<b>1. Statement</b>			
Novelty (N)	Claims	5 - 7	YES
	Claims	1 - 4	NO
Inventive step (IS)	Claims	.	YES
	Claims	1 - 7	NO
Industrial applicability (IA)	Claims	1 - 7	YES
	Claims		NO
<b>2. Citations and explanations:</b>			
<p><b>Claims 1-4</b></p> <p>Document 1 cited in the ISR [JP, 2004-83854, A (Kaneka Corp.), 18 March, 2004 (18.03.04)] describes a vinyl chloride-based resin composition that is comprised of 0.1-50% by weight polyvinyl chloride-based copolymer resin containing a vinyl chloride-based monomer and a macromonomer having a vinyl-based polymer as a main chain and 99.9-50% by weight vinyl chloride-based resin (refer to claims). Document 1 describes that 3-20% by weight macromonomer components that constitutes the polyvinyl chloride-based copolymer resin (refer to embodiments 1-8), and describes that the macromonomer components are 4.2, 0.5 and 2.5 parts by weight, based on 100 parts by weight vinyl chloride-based resin (embodiments 15-17).</p> <p>Therefore, the subject matters of claims 1-4 do not appear to be novel.</p> <p><b>Claims 1-4</b></p> <p>Document 2 cited in the ISR [JP, 61-43645, A (Kaneka Corp.), 3 March, 1986 (03.03.86)] describes the vinyl chloride-based resin composition that comprises a chloride-based copolymer resin obtained by copolymerizing vinyl chloride-based monomer and a bisphenol A modified di(meth)acrylate. Document 2 describes that 0.001-15 parts by weight bisphenol A modified di(meth)acrylate is added to 100 parts by weight vinyl chloride-based monomer (claims), and describes that the macromonomer components are 0.4-5 parts by weight, based on 100 parts by weight vinyl chloride-based resin (embodiments 1-8).</p> <p>Therefore, the subject matters of claims 1-4 do not appear to be novel.</p> <p><b>Claims 5-7</b></p> <p>Document 2 is described as above.</p> <p>The invention described in the subject matters of claims 5-7 and the inventions described in document 2 are compared. They differ in that the latter does not describe a fact of processing the resin composition using a specific method.</p> <p>Nevertheless, a person skilled in the art could have appropriately obtained the resin composition described in document 2 by using the method which is known through the art.</p> <p>Therefore, the subject matters of claims 5-7 do not appear to involve an inventive step.</p>			

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/004598

Box No. VIII      Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The subject matter of claim 1 describes that "A vinyl chloride-based copolymer resin is obtained by copolymerizing a vinyl monomer with a macromonomer having a main chain comprising a polymer of an ethylene unsaturated monomer with a double bond". From this description, one cannot decipher what the "vinyl chloride" is derived of.

Since the subject matter of claims 1 and 3 include comparative examples 5, 6, 10-14, 20, 21, and 25-29 that apparently do not exhibit the effect of the present application, so that an extension of the present application is not clear.



# 特許協力条約

発信人 日本国特許庁（国際調査機関）

REC'D 28 APR 2005

WIPO

PCT

出願人

株式会社カネカ

様

あて名

〒530-8288

大阪府大阪市北区中之島三丁目2番4号

PCT

国際調査機関の見解書

（法施行規則第40条の2）

〔PCT規則43の2.1〕

発送日  
（日・月・年）

26. 4. 2005

出願人又は代理人

の書類記号

B040174W001-

今後の手続きについては、下記2を参照すること。

国際出願番号

PCT/J P 2005/004598

国際出願日

（日・月・年） 16. 03. 2005

優先日

（日・月・年） 30. 03. 2004

国際特許分類（IPC）IntCl.<sup>7</sup> C08L27/06, C08F290/04

出願人（氏名又は名称）

株式会社カネカ

1. この見解書は次の内容を含む。

☒ 第I欄 見解の基礎

☐ 第II欄 優先権

☐ 第III欄 新規性、進歩性又は産業上の利用可能性についての見解の不作成

☐ 第IV欄 発明の単一性の欠如

☒ 第V欄 PCT規則43の2.1(a)(i)に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明

☐ 第VI欄 ある種の引用文献

☐ 第VII欄 国際出願の不備

☒ 第VIII欄 国際出願に対する意見

2. 今後の手続き

国際予備審査の請求がされた場合は、出願人がこの国際調査機関とは異なる国際予備審査機関を選択し、かつ、その国際予備審査機関がPCT規則66.1の2(b)の規定に基づいて国際調査機関の見解書を国際予備審査機関の見解書とみなさない旨を国際事務局に通知していた場合を除いて、この見解書は国際予備審査機関の最初の見解書とみなされる。

この見解書が上記のように国際予備審査機関の見解書とみなされる場合、様式PCT/ISA/220を送付した日から3月又は優先日から22月のうちいずれか遅く満了する期限が経過するまでに、出願人は国際予備審査機関に、適当な場合は補正書とともに、答弁書を提出することができる。

さらなる選択肢は、様式PCT/ISA/220を参照すること。

3. さらなる詳細は、様式PCT/ISA/220の備考を参照すること。

見解書を作成した日

12. 04. 2005

名称及びあて先

日本国特許庁（ISA/J P）

郵便番号100-8915

東京都千代田区霞が関三丁目4番3号

特許庁審査官（権限のある職員）

加賀 直人

電話番号 03-3581-1101 内線 3457

4 J

3446

様式PCT/ISA/237（表紙）（2004年1月）

## 第I欄 見解の基礎

1. この見解書は、下記に示す場合を除くほか、国際出願の言語を基礎として作成された。

☐ この見解書は、\_\_\_\_\_語による翻訳文を基礎として作成した。  
それは国際調査のために提出されたPCT規則12.3及び23.1(b)にいう翻訳文の言語である。

2. この国際出願で開示されかつ請求の範囲に係る発明に不可欠なヌクレオチド又はアミノ酸配列に関して、以下に基づき見解書を作成した。

a. タイプ ☐ 配列表

☐ 配列表に関連するテーブル

b. フォーマット ☐ 書面

☐ コンピュータ読み取り可能な形式

c. 提出時期 ☐ 出願時の国際出願に含まれる

☐ この国際出願と共にコンピュータ読み取り可能な形式により提出された

☐ 出願後に、調査のために、この国際調査機関に提出された

3. ☐ さらに、配列表又は配列表に関連するテーブルを提出した場合に、出願後に提出した配列若しくは追加して提出した配列が出願時に提出した配列と同一である旨、又は、出願時の開示を超える事項を含まない旨の陳述書の提出があった。

4. 補足意見：

第V欄 新規性、進歩性又は産業上の利用可能性についてのPCT規則43の2.1(a)(i)に定める見解、  
それを裏付ける文献及び説明

## 1. 見解

新規性 (N)

請求の範囲 5-7

請求の範囲 1-4

有  
無

進歩性 (IS)

請求の範囲

請求の範囲 1-7

有  
無

産業上の利用可能性 (IA)

請求の範囲 1-7

請求の範囲

有  
無

## 2. 文献及び説明

## ・ 請求の範囲 1 - 4

国際調査報告で示された文献1 [JP 2004-83854 A (鐘淵化学工業株式会社) 2004.03.18] には、塩化ビニル系モノマーとビニル系重合体を主鎖とするマクロモノマーとからなる塩化ビニル系共重合樹脂0.1～50重量%および塩化ビニル系樹脂99.9～50重量%からなる塩化ビニル樹脂組成物(特許請求の範囲)であって、当該塩化ビニル系共重合樹脂に占める当該マクロモノマー成分が3～20重量%である旨(実施例1-8)、当該塩化ビニル樹脂100重量部を基準とした、当該マクロモノマー成分の含量が4.2重量部、0.5重量部、2.5重量部である旨(実施例15-17)の記載がある。

したがって、請求の範囲1-4に記載された発明は、新規性を有しない。

## ・ 請求の範囲 1 - 4

国際調査報告で示された文献2 [JP 61-43645 A (鐘淵化学工業株式会社) 1986.03.03] には、塩化ビニル系モノマーとビスフェノールA変性ジ(メタ)アクリレートとの共重合体と塩化ビニル系樹脂とからなる塩化ビニル系樹脂組成物であって、当該ビスフェノールA変性ジ(メタ)アクリレートを当該塩化ビニル系モノマー100重量部に対して、0.001～15重量部添加する旨(特許請求の範囲)、当該塩化ビニル樹脂100重量部を基準とした、当該マクロモノマー成分の含量が0.4～5重量部(実施例1-8)である旨の記載がある。

したがって、請求の範囲1-4に記載された発明は、新規性を有しない。

## 第Ⅷ欄 国際出願に対する意見

請求の範囲、明細書及び図面の明瞭性又は請求の範囲の明細書による十分な裏付についての意見を次に示す。

請求の範囲 1 には、「ビニル系モノマーと、二重結合を含有するエチレン性不飽和モノマーからなる重合体を主鎖に有するマクロモノマーとを共重合して得られる塩化ビニル系共重合樹脂」と記載されているが、当該「塩化ビニル」が何に由来するものなのか当該記載からは判断ができない。

請求の範囲 1, 3 は、明らかに本願発明の効果を奏さないもの（比較例 5, 6, 10-14, 20, 21, 25-29）を包含するために、本願発明の外延が不明確である。

## 補充欄

いずれかの欄の大きさが足りない場合

## 第 V 欄の続き

## ・請求の範囲 5 - 7

上記文献 2 は、前述のとおりである。

本願の請求の範囲 5 - 7 に記載された発明と上記文献 2 に記載された発明とを対比すると、後者には上記樹脂組成物を特定の方法で加工する旨の記載がない点で両者は相違する。

しかしながら、上記文献 2 に記載された発明の樹脂組成物を周知の方法で加工することは、当業者が適宜なし得ることである。

したがって、請求の範囲 5 - 7 に記載された発明は、進歩性を有しない。